

XXV.—On undescribed Fossil Entomostraca from the Brick-earth of the Nar. By GEORGE STEWARDSON BRADY.

[Plate IX.]

For the opportunity of describing the following species of Ostracoda I am indebted to the kindness of Professor T. Rupert Jones, from whom I received the specimens. An account of the deposit in which they occurred was given in the 'Geological Magazine,' vol. ii. p. 8, to which the reader is referred. The carapaces were very few in number, and belonged to the four species here described.

Order OSTRACODA.

Fam. Cypridæ.

Genus CYTHERIDEA, Bosquet.

Cytheridea punctillata, n. sp. Pl. IX. figs. 9–11.

Valves oblong, subtriangular, convex. Dorsal margin gently arched, highest at its anterior third; ventral margin straight. Anterior border broad and well rounded; posterior narrower, and sloping steeply to its lower extremity, which forms a rounded angle. Seen *from above*, the carapace is oval in outline, and shows scarcely any appearance of pitting. *End view* suborbicular. *Surface* marked with fine and thickly set puncta. Length $\frac{1}{10}$ th of an inch.

This is nearly allied to *Cytheridea pinguis*, Jones, and to *Bairdia punctatella*, Bosquet, but is not strictly referable to either of these species. It differs from the former in surface-ornament, as well as in the absence of angulation of the dorsal border; from the latter, as well as from *B. Hebertiana*, in its more triangular shape and finer surface-ornament.

Genus CYTHERE, Müller.

Cythere carinata, n. sp.* Pl. IX. figs. 1–4.

Carapace obliquely subtetragonal, convex; margins flexuous. Dorsal margin arched, gibbous in the middle; ventral margin convex, produced anteriorly into a broad, strongly developed keel. Anterior extremity narrow, bordered partially by the ventral keel; posterior extremity broad, somewhat truncate. *Dorsal outline* broadly oval. *End view* ovate, tumid. *Surface*

* This species was noted by Prof. T. R. Jones in the 'Geological Magazine,' vol. ii. p. 306, under the name *Normania carinata*. I have, however, thought it advisable to abandon the MS. genus *Normania*, which was meant to include the "peach-stone" forms, but which I found incapable of accurate definition or separation.

covered with conspicuous concentrically arranged pits, which are well developed towards the margins, but nearly obsolete at the centre of the valves. Length $\frac{1}{4\frac{1}{2}}$ th of an inch.

This species is either identical with, or very closely related to, a recent form which is common in deep water on many parts of the British coast, but which appears hitherto to have escaped description.

Cythere arborescens, n. sp. Pl. IX. figs. 5-8.

Carapace broadly oval, well rounded in front, about once and a half as long as broad. The left valve is much larger than the right, overlapping it considerably on the dorsal and posterior margins. The dorsal margin is strongly arched, and slopes somewhat steeply behind towards the ventral margin, the two being produced at their junction into an obtusely angular prominence. Ventral margin nearly straight, somewhat incurved at its anterior third, and sloping gently upwards behind. The *dorsal outline* is oblong oval, compressed. *End view* ovate. *Surface* of the shell finely punctate, marked at the extremities and along the ventral margin with an elevated reticulated pattern, the ramifications of which are gradually lost on the surface of the valves. Length $\frac{1}{3\frac{1}{2}}$ th of an inch.

The recent species *Cythere convexa* differs from the present only in the general outline of the valves, which in *C. arborescens* are more decidedly quadrangular, and in the ornamentation of the surface. But though there is much diversity in the sculpturing of *C. convexa*, I have never met with any specimens, either recent or fossil, which show the least trace of the beautiful arborescent ribbing characteristic of the present species. The surface is also more finely punctate than in *C. convexa*; but I should not, on this account alone, have thought it justifiable to propose for it a distinct specific name.

Cythere aspera, n. sp. Pl. IX. figs. 12-19.

Valves oblong, quadrilateral, compressed. Extremities nearly equal, the anterior obliquely rounded, bordered by an elevated nodulated ridge, which terminates in a conspicuous tubercle over the anterior hinge, and is fringed with short blunt spines. Posterior border produced into a broad flattened lamina, which bears at the ventral angle three or four strong squamous spines. Dorsal margin nearly straight; ventral sinuated and squamous behind. *Seen from above*, the carapace is compressed, oblongo-ovate, tuberculated, spinous behind. *End view* quadrilateral. *Surface* of the valves marked by three conspicuous longitudinal ridges, the ventral ridge sharply

defined, the others nodulated and less distinct. The valves are covered, between the ridges, with rounded tubercles. In young specimens the longitudinal ridges are sharper, the surface-tubercles are sharp and spinous, and the elevated anterior border is absent or indistinct. The young state of this species is represented in figs. 12-15. Length (of the adult) $\frac{1}{3}$ rd of an inch.

The above description applies to well-marked specimens; and much latitude must be allowed as to the amount of spinous and tubercular development, especially with reference to the squamous spines and lamina of the posterior extremity.

EXPLANATION OF PLATE IX.

- Fig. 1. *Cythere carinata* (Brady), left valve, $\times 50$.
 Fig. 2. The same, seen from above, $\times 50$.
 Fig. 3. The same, seen from below, $\times 50$.
 Fig. 4. The same, end view, $\times 50$.
 Fig. 5. *Cythere arborescens* (Brady), perfect carapace, $\times 40$.
 Fig. 6. The same, seen from above, $\times 40$.
 Fig. 7. The same, seen from below, $\times 40$.
 Fig. 8. The same, end view, $\times 40$.
 Fig. 9. *Cytheridea punctillata* (Brady), left valve. $\times 40$.
 Fig. 10. The same, seen from above, $\times 40$.
 Fig. 11. The same, end view, $\times 40$.
 Fig. 12. *Cythere aspera* (Brady), right valve (young), $\times 40$.
 Fig. 13. The same, seen from above, $\times 40$.
 Fig. 14. The same, seen from below, $\times 40$.
 Fig. 15. The same, end view, $\times 40$.
 Fig. 16. The same, adult right valve, $\times 40$.
 Fig. 17. The same, seen from above, $\times 40$.
 Fig. 18. The same, seen from below, $\times 40$.
 Fig. 19. The same, end view, $\times 40$.

XXVI. *Classification of Polyps.* (Extract condensed from a Synopsis of the Polypi of the North Pacific Exploring Expedition under Captains Ringgold and Rodgers, U.S.N.) By A. E. VERRILL*.

THE report upon the collection made by Dr. William Stimpson, naturalist to the expedition, having been much delayed, the following tabular view of the classification adopted is here presented, with the hope that, if imperfect like every other, it may nevertheless afford some aid in illustrating the natural affinities of these humble forms.

Although, in a communication read before a zoological club at Cambridge, January 1862, I attempted to demonstrate the

* From the 'Proceedings of the Essex Institute,' U. S., for 1865.